THE OFFICE OF REGULATORY STAFF DIRECT TESTIMONY AND EXHIBITS

OF

GABY SMITH

August 10, 2012



DOCKET NO. 2012-3-E

ANNUAL REVIEW OF BASE RATES FOR FUEL COSTS OF DUKE ENERGY CAROLINAS, LLC

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1		DIRECT TESTIMONY AND EXHIBITS OF
2		GABY SMITH
3		ON BEHALF OF
4		THE SOUTH CAROLINA OFFICE OF REGULATORY STAFF
5		DOCKET NO. 2012-3-E
6		IN RE: ANNUAL REVIEW OF BASE RATES FOR FUEL COSTS OF
7		DUKE ENERGY CAROLINAS, LLC
8	Q.	PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND
9		OCCUPATION.
10	A.	My name is Gaby Smith. My business address is 1401 Main Street, Suite
11		900, Columbia, South Carolina, 29201. I am employed by the South Carolina
12		Office of Regulatory Staff ("ORS") as an Auditor.
13	Q.	PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND
14		EXPERIENCE.
15	A.	I received a Bachelor of Science Degree in Accounting from the
16		University of South Carolina in May 2006. Prior to joining ORS, I held a variety
17		of positions in finance, accounting, and auditing. I began my employment as an
18		auditor with ORS in June 2009 and have participated in various cases involving
19		the regulation of electric and telecommunication utilities.
20	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS
21		PROCEEDING?
22	A.	The purpose of my testimony is to present the results of ORS Audit
23		Staff's examination of the books and records pertaining to Duke Energy

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1		Carolinas, LLC's ("the Company" or "DEC") Fuel Adjustment Clause ("FAC")
2		operation. The current review period consists of actual costs from June 2011
3		through May 2012 and the Company's estimated costs for the months of June
4		through September 2012.
5	Q.	WHAT WAS THE PURPOSE OF THIS EXAMINATION?
6	A.	The purpose of this examination was to determine if the Company's
7		accounting practices in computing and applying the monthly FAC have been in
8		compliance with S.C. Code Ann. § 58-27-865 (Supp. 2011).
9	Q.	WHAT WAS THE SCOPE OF ORS'S EXAMINATION?
10	A.	ORS Audit Staff examined and verified the monthly fuel adjustment
11		factor calculations and the fuel recovery balances recorded in the Company's
12		books and records. The current fuel examination covered the actual period of June
13		2011 through May 2012 ("actual review period") and four (4) estimated months
14		from June to September 2012. The Audit Staff's examination consisted of:
15		1. Analyzing the Fuel Stock Account
16		ORS's analysis of the Fuel Stock Account consisted of verifying receipts to,
17		and issues from, the fuel management system to the general ledger, examining
18		monthly fuel charges originating in fuel accounting, and ensuring that only
19		proper charges were entered in the Company's computation of fuel costs for
20		purposes of adjusting base rates for fuel.
21		2. Sampling Receipts to the Fuel Stock Account
22		ORS's review of receipts to the Fuel Stock Account consisted of examining
23		and testing selected transactions which support additions to the account. Each

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transaction examined was tested for mathematical accuracy and vouched to a corresponding waybill or truck bill, supplier invoice, base cost report, a freight invoice, and transportation cost report. Transactions were then verified to a fuel management system payment voucher to verify payment of the correct amount to the vendors.

3. Verifying Charges to Nuclear Fuel Expense

ORS verified the expense amounts of nuclear fuel to the books and records for the actual review period to confirm the accuracy of these expenses to fuel amortization schedules.

4. <u>Verifying Purchased and Interchange Power Fuel Costs</u>

ORS verified the Company's purchased and interchange power fuel costs, kilowatt-hour ("kWh") purchases and kWh sales for the actual review period to the Company's "Intersystem Purchase and Sales Transaction" reports, individual vendor purchase schedules, and to monthly invoices, on a sample basis. ORS recomputed the Company's sales and purchases for the actual review period. The purchased and interchange power amounts for the actual review period and the resultant over (under)-recovery monthly deferred fuel amounts for the period reflect calculations which conform to S.C. Code Ann. § 58-27-865 (Supp. 2011). This statute addresses fuel costs related to purchased power. Subsection (A)(2)(b) of this statute states that the total delivered cost of economy purchases, including (but not limited to) transmission charges, are included in purchased power costs if those purchases are "less than the purchasing utility's avoided variable costs for the

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1		generation of an equivalent quantity of electric power." ORS applied this
2		statute to the examined economic purchases along with the applicable avoided
3		costs.
4	5	. <u>Verifying kWh Sales</u>
5		ORS verified total system kWh sales, as filed in the monthly fuel factor
6		computation, to monthly billed revenue reports for the actual review period.
7		The monthly kWh sales figures were then used to determine the fuel cost per
8		kWh sold.
9	6	Recalculating the Fuel Adjustment Factors and Verifying the Deferred Fuel
10		Costs
11		ORS recalculated the fuel cost adjustment factors for the actual review period
12		utilizing information obtained from the Company's records and verified these
13		total fuel costs to the Company's books and records. In recalculating the
14		monthly factors, ORS divided total fuel costs by total system kWh sales to
15		arrive at fuel costs per kWh sold. The base fuel cost per kWh was then
16		subtracted from the actual fuel cost per kWh sold. The resulting figure
17		represents the fuel cost adjustment above or below the base rate per kWh. The
18		actual South Carolina retail jurisdictional deferred fuel costs for each month
19		were verified to the Company's books and records.
20	7.	Recalculating the True-up of the Over (Under)-Recovered Fuel Costs
21		ORS analyzed and recomputed the cumulative over (under)-recovery of actual
22		base fuel costs for the period June 2011 through May 2012 and estimated over
23		(under)-recovery through September 2012. In addition, ORS recomputed the

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1		cumulative over (under)-recovery of actual environmental fuel costs for the
2		period June 2011 through May 2012 and estimated over (under)-recovery
3		through September 2012.
4	Q.	LAST YEAR'S SETTLEMENT AGREEMENT IN DOCKET NO. 2011-3-E
5		STATES "THE FOLLOWING TWO MATTERS WITH RESPECT TO
6		REAGENT COSTS ARE SUBJECT TO TRUE-UP IN THE DUKE
7		ENERGY CAROLINAS 2012 FUEL HEARING: (1) BOOKED COST
8		VERSUS ACTUAL COST AND (2) BOOKED SALES AND USE TAX
9		VERSUS ACTUAL SALES AND USE TAX." HAVE THESE TRUE-UPS
10		BEEN DONE?
11	A.	Yes. The true-ups are incorporated in Audit Exhibit GS-7.
12	Q.	PLEASE EXPLAIN THE AUDIT EXHIBITS ATTACHED TO YOUR
13		TESTIMONY.
14	A.	ORS prepared audit exhibits from the Company's books and records,
15		reflecting fuel costs during the actual review period. Specifically, these exhibits
16		include the following:
17		AUDIT EXHIBIT GS-1: COAL COST STATISTICS
18		This audit exhibit details spot and contract coal received, separately and
19		combined, for the actual review period. The comparison is made in the following
20		five (5) areas:
21		(1) Tons Received
22		(2) Percentage of Total Tons Received
23		(3) Total Received Cost

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1	(4) Received Cost Per Ton
2	(5) Cost Per thousand British thermal units ("MBTU")
3	ORS then took the combined total received cost for the twelve (12) months and
4	divided this by the combined total tons for the twelve (12) months to arrive at a
5	weighted average cost per ton of \$96.77 for the actual review period.
6	AUDIT EXHIBIT GS-2: RECEIVED COAL - COST PER TON
7	COMPARISON
8	This audit exhibit details the received cost per ton for coal for each month of the
9	actual review period for DEC, Progress Energy Carolinas, Inc., and South
10	Carolina Electric & Gas Company. For comparison purposes, ORS has shown the
11	invoice cost per ton, freight cost per ton, total cost per ton, and the cost per
12	MBTU.
13	AUDIT EXHIBIT GS-3: TOTAL BURNED COST (FOSSIL AND
14	NUCLEAR)
15	This audit exhibit details the per book cost of fuel burned for electric generation
16	during the actual review period. The burned cost of each class of fuel is shown
17	separately. These costs are used in the computations of the base fuel cost
18	component. Emission allowance expenses and other variable environmental costs,
19	as described in § 58-27-865(A)(1), are shown separately on Audit Exhibit GS-6.
20	AUDIT EXHIBIT GS-4: COST OF FUEL
21	This audit exhibit details ORS's computation of the total fuel cost applicable to
22	the factor computation. There are three (3) components used in arriving at this
23	cost. These components are:

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1	(1) Total Cost of Fuel Burned
2	(2) Purchased and Interchange Power Fuel Cost
3	(3) Fuel Cost Recovered from Intersystem Sales
4	Total Cost of Fuel Burned This amount is the total cost of all fossil and nuclear
5	fuel burned during the actual review period used in the base fuel component
6	computation. A detailed breakdown of coal, oil, gas, biomass and nuclear fuel can
7	be seen in Audit Exhibit GS-3.
8	Purchased and Interchange Power Fuel Cost This amount is the fuel cost of
9	DEC's monthly kWh purchases from other electric utilities or power marketers.
10	Fuel Cost Recovered from Intersystem Sales This amount is the fuel cost
11	related to kWhs sold during the period to other electric utilities or power
12	marketers. Total fuel cost applicable to the base fuel component factor is
13	computed by adding the cost of fuel burned to purchased and interchange power
14	fuel costs. This amount is then reduced by fuel cost associated with intersystem
15	sales.
16	AUDIT EXHIBIT GS-5: S.C. RETAIL COMPARISON OF FUEL
17	REVENUES & EXPENSES
18	This audit exhibit details the actual fuel cost computations for June 2011 through
19	May 2012 as well as estimated fuel costs for June through September 2012. The
20	exhibit also shows the computations of the cumulative over (under)-recovery
21	balances.
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I		AUDIT EXHIBIT GS-6: TOTAL ENVIRONMENTAL COSTS
2		This audit exhibit details the total environmental costs for the actual review period
3		for sulfur dioxide ("SO2") emission allowances, limestone, ammonia, and urea.
4		For this review period, there were no nitrogen oxide ("NOx") emission
5		allowances or dibasic acid costs.
6		AUDIT EXHIBIT GS-7: DETAILS OF ENVIRONMENTAL COSTS
7		This audit exhibit details the actual environmental cost computations for the
8		actual review period for SO ₂ emission allowances, limestone, ammonia, urea, and
9		estimates of variable environmental costs for June through September 2012. This
10		exhibit also shows the computation of the cumulative over (under)-recovery
11		balances and various adjustments for June 2011 through May 2012.
12	Q.	WOULD YOU PLEASE EXPLAIN THE CUMULATIVE OVER (UNDER)-
13		RECOVERY AMOUNT BROUGHT FORWARD IN AUDIT EXHIBIT
14		GS-5?
15	A.	Yes. As detailed in Audit Exhibit GS-5, ORS brought forward a
16		cumulative (under)-recovery balance from May 2011 of (\$528,767). The
17		Company's testimony (McManeus Exhibit 4) reflects a rounded (under)-recovery
18		balance brought forward from May 2011 of (\$529,000).
19	Q.	PLEASE ELABORATE ON ORS AUDIT STAFF'S COMPUTATION OF
20		THE TRUE-UP OF OVER (UNDER)-RECOVERED FUEL COSTS.
21	A.	ORS Audit Exhibit GS-5 provides details of ORS's calculation of the
22		actual cumulative over-recovery balance through May 2012, and the estimated
23		balance through September 2012. The cumulative over-recovery amount as of

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1		May 2012 totaled \$41,792,888. ORS then added estimated over-recoveries of
2		\$4,338,782 for June 2012, \$6,128,348 for July 2012, \$4,988,187 for August 2012,
3		and \$625,372 for September 2012 to arrive at a cumulative over-recovery balance
4		of \$57,873,577 through September 2012. The Company's testimony (McManeus
5		Exhibit 4) in this docket reports the rounded cumulative over-recovery total
6		through May 2012 as \$41,792,000 and through September 2012, the rounded
7		cumulative over-recovery totals \$57,872,000.
8	Q.	DID THE COMPANY MAKE ANY ADJUSTMENTS OR TRUE-UPS
9		DURING THE ACTUAL REVIEW PERIOD FOR THE BASE FUEL
10		COMPONENT?
11	A.	Yes. As reflected in Audit Exhibit GS-5, the Company recorded adjustment (1) in
12		the amount of \$867 in June 2011 and adjustment (2) in the amount of \$8,265 in
13		July 2011. Both adjustments are the result of a timing lag regarding biomass
14		costs. These costs were adjusted to reflect pricing at the allowable avoided cost
15		rate.
16	Q.	WOULD YOU PLEASE EXPLAIN THE CUMULATIVE OVER (UNDER)-
17		RECOVERY BALANCE BROUGHT FORWARD IN AUDIT EXHIBIT
18		GS-7?
19	A.	Yes. As detailed in Audit Exhibit GS-7, ORS brought forward a
20		cumulative over-recovery balance from May 2011 of \$3,595,468. The Company's
21		testimony (McManeus Exhibit 6) reports a rounded cumulative over-recovery
22		balance brought forward from May 2011 of \$3,595,000.

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1	Q.	PLEASE ELABORATE ON ORS AUDIT STAFF'S COMPUTATION OF
2		THE TRUE-UP OF OVER (UNDER)-RECOVERED ENVIRONMENTAL
3		COSTS.

- A. ORS Audit Exhibit GS-7 provides details of ORS's calculation of the actual cumulative over-recovery balance through May 2012, and the estimated balance through September 2012. The cumulative over-recovery amount as of May 2012 totaled \$7,198,018. ORS then added estimated (under)-recoveries of (\$109,404) for June 2012, (\$32,648) for July 2012, (\$40,891) for August 2012 and an over-recovery of \$120,934 for September 2012. ORS also added over-recovery adjustments of \$5,151, \$18,670, \$13,227, and \$1,024,804 to arrive at a cumulative over-recovery of \$8,160,813 through September 2012. The Company's testimony (McManeus Exhibit 6) in this docket reports the rounded cumulative over-recovery total through May 2012 as \$7,160,000 and through September 2012, the rounded cumulative over-recovery balance totals \$7,099,000. ORS's over-recovery adjustments in May and September 2012 are more fully addressed later in my testimony as adjustments (3) through (6).
- 17 Q. DID ORS MAKE ANY ADJUSTMENTS OR TRUE-UPS DURING THE
 18 ACTUAL REVIEW PERIOD FOR THE ENVIRONMENTAL COST
 19 COMPONENT?
- 20 A. Yes. As previously stated, ORS made the following adjustments as shown on Audit Exhibit GS-7:

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1		Adjustment (3) - In May 2012, ORS made an over-recovery adjustment in the
2		amount of \$5,151 to apply the appropriate sales tax on reagent expenses for the
3		month of July 2011.
4		Adjustment (4) - In May 2012, ORS made an over-recovery adjustment in the
5		amount of \$18,670 to correct transposition errors regarding gains on emission
6		allowance sales in the months of February through May 2012.
7		Adjustment (5) - In the months of December 2011 and January, March, and April
8		of 2012, the Company included a system total of \$51,174 for experimental
9		reagent expenses for the reduction of NOx and mercury emissions. As these
10		experimental reagents had not been approved by the Commission, ORS made a
11		S.C. retail over-recovery adjustment of \$13,227.
12		Adjustment (6) - In September 2012, ORS made a S.C. retail over-recovery
13		adjustment of \$1,024,804 to account for known and measurable gains totaling
14		\$3,945,728, which were omitted from the Company's testimony.
15	Q.	WHAT ARE THE COMBINED CUMULATIVE OVER (UNDER)-
16		RECOVERIES OF THE BASE FUEL COST AND ENVIRONMENTAL
17		COST COMPONENTS AS OF ACTUAL MAY 2012 AND AS OF
18		ESTIMATED SEPTEMBER 2012?
19	A.	As of May 2012, based on a base fuel cost component cumulative over-
20		recovery balance of \$41,792,888 and an environmental cost component
21		cumulative over-recovery balance of \$7,198,018, the combined result totals
22		\$48,990,906. As of September 2012, based on a base fuel cost component
23		cumulative over-recovery balance of \$57,873,577 and an environmental cost

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1 component cumulative over-recovery balance of \$8,160,813 the combined result
2 totals \$66,034,390.

3 Q. WHAT IS THE RESULT OF ORS'S EXAMINATION?

- A. Based on ORS Audit Staff's examination of the Company's books and records, and its operation of the fuel cost recovery mechanism, it is ORS's opinion that, subject to ORS adjustments (3) through (6) for the environmental component, the Company's accounting practices in computing and applying the monthly FAC have been in compliance with S.C. Code Ann. § 58-27-865 (Supp. 2011).
- 10 Q. DOES THIS CONCLUDE YOUR TESTIMONY?
- 11 A. Yes, it does.

Duke Energy Carolinas, LLC Coal Cost Statistics June 2011 - May 2012 Docket No. 2012-3-E

		Spot			
<u>Month</u>	Tons <u>Received</u>	Percentage of Total Tons Received	Total Received Cost	Received Cost Per Ton	Cost <u>Per MBTU</u>
	Tons	%	\$	\$	\$
Jun-11	51,904	5.00%	5,089,109	98.05	3.9912
Jul-11	57,088	5.09%	5,700,989	99.86	4.0575
Aug-11	126,879	8.89%	12,587,154	99.21	4.0807
Sep-11	175,133	13.57%	18,239,336	104.15	4.2147
Oct-11	154,278	11.36%	14,777,943	95.79	3.9774
Nov-11	183,946	13.96%	18,243,451	99.18	4.4299
Dec-11	115,880	8.87%	12,249,468	105.71	4.2638
Jan-12	26,453	2.35%	2,519,263	95.24	6.5179
Feb-12	9,044	0.83%	642,620	71.05	3.2555
Mar-12	0	0.00%	(4,647)	0.00	0.0000
Apr-12	0	0.00%	279	0.00	0.0000
May-12	0	0.00%	0	0.00	0.0000
Totals (6/11-5/12)	900,605	_	90,044,965		

		Contrac	t		
Month	Tons <u>Received</u>	Percentage of Total Tons Received	Total Received Cost	Received Cost Per Ton	Cost <u>Per MBTU</u>
	Tons	%	<u> </u>	<u> </u>	\$
Jun-11	986,996	95.00%	87,235,848	88.39	3.6539
Jul-11	1,064,373	94.91%	94,618,770	88.90	3.6676
Aug-11	1,300,837	91.11%	119,035,511	91.51	3.7625
Sep-11	1,115,068	86.43%	100,175,938	89.84	3.6827
Oct-11	1,203,913	88.64%	109,225,008	90.73	3.7183
Nov-11	1,133,276	86.04%	103,415,191	91.25	3.7311
Dec-11	1,190,921	91.13%	108,591,594	91.18	3.7455
Jan-12	1,100,659	97.65%	100,841,114	91.62	3.7667
Feb-12	1,085,149	99.17%	101,341,141	93.39	3.8325
Mar-12	795,810	100.00%	75,382,206	94.72	3.8386
Apr-12	867,257	100.00%	83,373,672	96.13	3.8556
May-12	820,718	100.00%	77,901,049	94.92	3.8266

Duke Energy Carolinas, LLC Coal Cost Statistics June 2011 - May 2012 Docket No. 2012-3-E

	Tons	Percentage of	Total		Adjusted Total	Received Cost	Cost
<u>Month</u>	Received	Total Tons Received	Received Cost	Adjustments	Received Cost	Per Ton	Per MBTU
	Tons	%	\$	\$	\$	\$	\$
Jun-11	1,038,900	100.00%	92,324,957	5,441,425	97,766,382	94.11	3.8625
Jul-11	1,121,461	100.00%	100,319,759	5,067,998	105,387,757	93.97	3.8566
Aug-11	1,427,716	100.00%	131,622,665	4,789,707	136,412,372	95.55	3.9197
Sep-11	1,290,201	100.00%	118,415,274	6,031,033	124,446,307	96.45	3.9403
Oct-11	1,358,191	100.00%	124,002,951	5,834,508	129,837,459	95.60	3.9037
Nov-11	1,317,222	100.00%	121,658,642	5,231,101	126,889,743	96.33	3.8614
Dec-11	1,306,801	100.00%	120,841,062	4,829,680	125,670,742	96.17	3.9392
Jan-12	1,127,112	100.00%	103,360,377	5,275,499	108,635,876	96.38	3.9188
Feb-12	1,094,193	100.00%	101,983,761	5,490,020	107,473,781	98.22	4.0181
Mar-12	795,810	100.00%	75,377,559	5,089,746	80,467,305	101.11	4.0947
Apr-12	867,257	100.00%	83,373,951	3,990,639	87,364,590	100.74	4.0598
May-12	820,718	100.00%	77,901,049	4,525,950	82,426,999	100.43	4.0628
Totals (6/11- 5/12)	13,565,582		1,251,182,007	61,597,306	1,312,779,313		

Total Received Cost	 1,312,779,313	_	•	07.77
Total Tons Received	 13,565,582	=	3	96.77
	10,000,000			

Duke Energy Carolinas, LLC Received Coal - Cost Per Ton Comparison June 2011 - May 2012 Docket No. 2012-3-E

Duke Energy Carolinas, LLC

Invoice Cost Per Ton	Freight Cost <u>Per Ton</u>	Total Cost <u>Per Ton</u>	Cost <u>Per MBTU</u>
\$	\$	\$	\$
65.38	28.73	94.11	3.8625
65.43	28.54	93.97	3.8566
68.41	27.14	95.55	3.9197
67.79	28.66	96.45	3.9403
67.43	28.17	95.60	3.9037
67.75	28.58	96.33	3.8614
69.75	26.42	96.17	3.9392
68.22	28.16	96.38	3.9188
69.62	28.60	98.22	4.0181
71.14	29.97	101.11	4.0947
71.82	28.92	100.74	4.0598
70.76	29.67	100.43	4.0628
	Per Ton \$ 65.38 65.43 68.41 67.79 67.43 67.75 69.75 68.22 69.62 71.14 71.82	Per Ton Per Ton \$ \$ 65.38 28.73 65.43 28.54 68.41 27.14 67.79 28.66 67.43 28.17 67.75 28.58 69.75 26.42 68.22 28.16 69.62 28.60 71.14 29.97 71.82 28.92	Per Ton Per Ton Per Ton \$ \$ \$ 65.38 28.73 94.11 65.43 28.54 93.97 68.41 27.14 95.55 67.79 28.66 96.45 67.43 28.17 95.60 67.75 28.58 96.33 69.75 26.42 96.17 68.22 28.16 96.38 69.62 28.60 98.22 71.14 29.97 101.11 71.82 28.92 100.74

Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc.

Month	Invoice Cost Per Ton	Freight Cost <u>Per Ton</u>	Total Cost Per Ton	Cost <u>Per MBTU</u>
	\$	\$	\$	\$
Jun-11	60.69	28,21	88.90	3.6660
Jul-11	65.02	32.10	97.12	4,0236
Aug-11	63.48	26.18	89.66	3.6926
Sep-11	61.74	27.26	89.00	3.7095
Oct-11	64.97	26.94	91.91	3.7730
Nov-11	62.09	31.02	93.11	3.8410
Dec-11	61.45	28.54	89.99	3.8412
Jan-12	66.69	27.24	93.93	3.8349
Feb-12	65.24	32.42	97.66	3.9985
Mar-12	65.90	24.69	90.59	3.7093
Apr-12	120.50	32.76	153.26	6.2082
May-12	68.17	29.62	97.79	3.9601

Duke Energy Carolinas, LLC Received Coal - Cost Per Ton Comparison June 2011 - May 2012 Docket No. 2012-3-E

South Carolina Electric & Gas Company

<u>Month</u>	Invoice Cost <u>Per Ton</u>	Freight Cost <u>Per Ton</u>	Total Cost <u>Per Ton</u>	Cost <u>Per MBTU</u>
	\$	\$	\$	\$
Jun-11	75.14	34.60	109.74	4.3500
Jul-11	76.52	33.11	109.63	4.3600
Aug-11	81.09	33.45	114.54	4.5600
Sep-11	79.56	32.94	112.50	4.4600
Oct-11	79.74	32.60	112.34	4.4800
Nov-11	78.91	32.74	111.65	4.4600
Dec-11	80.30	32.80	113.10	4.5200
Jan-12	78.09	32.11	110.20	4.3700
Feb-12	77.83	32.75	110.58	4.3600
Mar-12	79.58	34.24	113.82	4.4900
Apr-12	79.54	32.39	111.93	4.4000
May-12	79.89	31.58	111.47	4.3800

Duke Energy Carolinas, LLC Total Burned Cost (Fossil and Nuclear) June 2011 - May 2012 Docket No. 2012-3-E

Total Burned	Cost	6	e e	171,614,680		190,161,337	171 884 111	111004111	17/,195,089	99,661,466	100 040 336	077,242,001	104,714,312	114 108 340	(+C,0) + (++++++++++++++++++++++++++++++++++	715,120,08	91.815.099	01 063 073	71,503,5/2	124,758,114	1 485 527 777	7/7// 55,504,1
	LI	%	•	11.12%	70.7	11.41%	12.40%	2000	14./9%	18.61%	10 32 %	0/90/1	21.60%	20.08%	0.00	0%61.77	24.42%	20.670/	0/ /0.07	15.64%	16.630%	10.02 / 0
;	Nuclear	4	÷	19.080.864	21 700 053	21,/00,903	21,309,670	10 000 71	10,000,10	18,552,048	19,505,147	(4160067 23 (20 000	769,070,77	22,937,574	31 443 345	C#7,C##,T7	22,419,681	10 013 431	40.00 A CO. C. A	19,513,135	246.905.366	and a start
;	SS	%		0.10%	0.070	0.07	0.12%	0.010/	0.10.0	%00.0	0.00%	2000	0.00%	0.00%	0.000	0/00.0	0.00%	0.00%	•	0.00%	0.03%	
Ď	DIOMASS	6 93		167,502	123 306	14.000	200,436	16 740	71,01	313	0	•	>	0	•	> 1	0	0		9	508,396	
		%	, e o t	3./0%	8.00%	2000	3.96%	1 03%	1 210	1.21%	4.36%	7002 9	0//20	7.67%	0.33%	2000	%0/.6	%99.6		7.20%	5.84%	
200	68	9 9	012127	0,332,320	15.386.092	1060061	6,803,869	1.305.903	1 304 710	017640661	4,404,080	889 289 9	000610060	8,758,624	9.009.246	2000	075,/04,0	8,878,910	*** >00 0	6,980,113	86,784,783	
	Š	%	A 490/	0.40 /0	0.61%		0.97%	0.85%	700%	0/0/0	1.21%	1.12%	7647	1.04%	1.64%	0 0 0 0	0.3470	1.72%	1 220/	1.2270	1.03%	
#2 Oil	•	A	819 711	01/1/11	1,160,369	0.000	1,0/1,94/	1,087,679	890 909		1,215,873	1,174,168	1 0/0 000	1,505,035	1,584,608	76V 798	000,400	1,580,084	1 521 874	1,0,175,1	15,252,952	
	è	0/	84.60%		79.82%	/022 00	0/.00.70	83.32%	79.38%	1011	/2.11%	70.89%	70 610/	0/10.0/	66.84%	64 94%		67.95%	75 040%	D/ P/10/	76.48%	
Coal	9	÷	145,194,083		151,790,517	141 802 190	141,074,107	105,976,042	79,108,827	261 100 25	07,674,170	74,231,564	80 634 066	000,450,00	64,584,418	59,621,406		02,491,54/	04 736 090	accharity .	1,136,085,775	
Month			Jun-11		Jul-III	Ang.11	11-9m1,	Sep-11	Oct-11	Nov. 11	II-AON	Dec-11	.Ian-12	77-770	Feb-12	Mar-12	A 13	Apr-12	Mav-12		Totals	

Duke Energy Carolinas, LLC Cost of Fuel June 2011 - May 2012 Docket No. 2012-3-E

		Purchased and	Fuel Cost Recovered	
	Total Cost of Fuel	Interchange Power Fuel	from Intersystem	
Month	Burned	Cost	<u>Sales</u>	Total Fuel Cost
	\$	\$	\$	\$
Jun-11	171,614,680	23,751,395	(2,577,628)	192,788,447
Jul-11	190,161,337	22,906,785	(5,701,067)	207,367,055
Aug-11	171,884,111	29,603,427	(2,124,372)	199,363,166
Sep-11	127,195,089	18,483,633	(1,063,351)	144,615,371
Oct-11	99,661,466	22,425,316	(687,499)	121,399,283
Nov-11	100,949,226	24,093,575	(1,043,283)	123,999,518
Dec-11	104,714,312	18,456,374	(754,719)	122,415,967
Jan-12	114,198,349	17,961,767	(859,733)	131,300,383
Feb-12	96,621,517	21,080,588	(585,257)	117,116,848
Mar-12	91,815,099	16,523,861	(682,665)	107,656,295
Apr-12	91,963,972	25,341,907	(456,046)	116,849,833
May-12	124,758,114	21,763,710	(1,685,099)	144,836,725
Total	1,485,537,272	262,392,338	(18,220,719)	1,729,708,891

S.C. Retail Comparison of Fuel Revenues & Expenses June 2011 - September 2012 Duke Energy Carolinas, LLC Docket No. 2012-3-E

		June 2011		July 2011		August 2011	September 2011		October 2011	November 2011	December 2011	January 2012
Fossil Fuel including Biomass	•	152,533,816	•	168,460,374	•	150 574 441 6	400 206 272	•	4			
Nuclear Fuel	•	40,000,04	•		•	# 144's 15'50'	5 10'00C'001	^	\$ 514,805,15	81,444,079 \$	82,093,420 \$	91,260,775
Solar Distribution Consession	•	19,000,004	A	21,/00,963	v	21,309,670 \$	18,808,716	S	18,552,048 \$	19,505,147 \$	22.620.892 \$	22 937 573
	v»	8'88	v	8,791	v	10,471 \$	8,623	S	12.195 \$	6315 \$	30 410 6	10.00
	رم.	23,751,395	•	22,906,785	\$	29,603,427 \$	18,483,633	- 43	22 425.316 \$	24 001 575 €	10 456 274 6	10,000
Sub-1 Otal	•	195,375,074	s	213,076,913	<u>س</u>	201,498,009 \$	145.687.345		122 N98 977 C	428.040.44g. e	400,000,014	101,108,11
Less: Intersystem Sales	••	2,577,628	w	5,701,067	W	2.124.372 \$	1.063.354		687 490	4 040 000	\$ 601,012,621	132,178,715
Total Fuel Costs	,	192,797,446	S	207.375.846		199 173 637 €	144 623 004	3	404 444 470 4	207'560'1	\$ 61/40/	859,733
Total System kWh Sales Excluding Intersystem Sales		7 284 440 000		400 010 000 0	•		100000	•	\$ 0/4/114/17	124,000,633 \$	122,455,386 \$	131,318,982
SikWh Salae	•	000'611'196'		7,788,342,000		8,351,124,000	7,481,207,000		6,046,921,000	5,867,549,000	6.271.931.000	6.895.690.000
Loce: Roce Calce Des Dieffe	A	0.026120	ca.	0.026626	s	0.023874 \$	0.019332	•	0.020078 \$	0.021134 \$	0.019524	0.049044
First Adjustment Des 1986	م	0.020625	۵	0.020625	•	0.020625 \$	0.020625	w	0.025273 \$	0.025273 \$	0.026273 €	0.015073
S. Charles and the house	··	(0.005495)	s	(0.006001)	w	(0.003249) \$	0.001293	w	0.005195 \$	0.004139 \$	0.02220	0.02020
Over(Clades) December		1,896,126		2,005,761		2,152,357	1,930,682		1,571,166	1,508.940	1 603 948	1 724 148
Cumulation Occuminates Beautiful Description	S	(10,419,212)	s	(12,036,572)	\$	\$ (800,566,9)	2,496,372	~	8,162,207 \$	6.245.503 \$	9 224 047 6	40 724 024
Cumulative Over/Conderly Recovery - 17101 20010	s	(528,767)	S	(10,947,112)	v,	(22,975,419) \$	(29,968,427)	u	(27.472.055) \$	/10 2//0 8/81 ¢	40 054 245)	10,121,031
company Adjustments	us	867 (1)	(1) \$	8,265	8	•		•	· ·	* (photosocial)	# (ntn'ton'n)	(3,843,248)
Cumulative Over/(Under) Recovery	.	(10 047 112)		(92 G7E 440)		4 1207 000 007						

Please Note:

In Audit Exhibit GS-5, ORS reflects Over-Recovery amounts without parentheses and reflects (Under)-Recovery amounts with parentheses.

6,877,783

(3,843,248) \$

\$ (19,309,848) \$ (13,064,345) \$

(29,968,427) \$ (27,472,055)

(22,975,419)

(10,947,112)

For the actual review period and estimated months, the monthly "Renewable Purchased Power" (reflected on McManeus Exhibit 4, line 4) amounts are reflected on ORS's Audit Exhibit GS-5 in the "Purchased & Interchange Power" figures for those respective months.

S.C. Retail Comparison of Fuel Revenues & Expenses
June 2011 - September 2012
Docket No. 2012:3-E **Duke Energy Carolinas, LLC**

	*******	**************************************		ACTUAL	AL		***************************************			ECTIMATED	ć	
		February		March		April	May		June		August	Sentember
		2012		2012		2012	2012		2012	2012	2012	2012
Fossil Fuel including Biomass	s,	75.178.272	•	69 395 418	J	72 0E0 E44 e	405 244 070	•	400			
Nuclear Fire	•		•	012/22/20	•	\$ 1±0'000'71	8/8'447'COI	^	\$ 000,833,000	128,529,000 \$	130,608,000 \$	148,685,000
	A	21,443,245	v	22,419,681	S	19,013,431 \$	19,513,135	ş	20,647,000 \$	22,227,000 \$	22 227 000 \$	19 267 000
Solar Distribution Generation	s,	24,143	s	37,176	s	41,274 \$	41,472	s,	62.000 S	5 000 8	3 000 95	47 000
ruichaeu e merchange rower	م	21,080,588	s	16,523,861	\$	25,341,907 \$	21,763,710	49	17,260,000 \$	17.201,000 \$	22.420.000 \$	15 927 000
June 1 order of the control of the c	•	117,726,248	49	108,376,136	s	117,347,153 \$	146,563,296	ş	157.802.000 \$	168 016 000 \$	175 341 000 E	192 026 000
Less: Intersystem sales	[م	585,257	s	682,665	w	456,046 \$	1,685,099	s	2.501.000 \$	5.264.000 \$	1 036 000 €	1 001 000
iotal Fuel Costs	G	117,140,991	S	107,693,471	s	116,891,107 \$	144,878,197	<u>م</u>	155,301,000 \$	162,752,000 \$	173,375,000 \$	182.835.000
Total System kWh Sales Excluding Intersystem Sales		6,519,271,000		6.137.030.000		5.909.384.000	6.017.638.000		¢ 708 £29 000	400		
S/kWh Sales		0.047000		0.047540	•	nanikanian da	ממימים וממים		0,130,050,000	7,361,038,000	7,628,113,000	7,328,811,000
Less: Base Sales Der kWh	.	0.01/900	<i>n</i> ·	0.01/548	vs.	0.019781 \$	0.023996	w	0.022843 \$	0.022050 \$	0.022728 \$	0.024947
First Adjustment Dor Like	. ام	0.025273	S	0.025273	s	0.025273 \$	0.025273	•	0.025273 \$	0.025273 \$	0.025273 \$	0.025273
C PARK Calon (COR)	s.	0.007305	s	0.007725	s	0.005492 \$	0.001277	s	0.002430 \$	0.003223 \$	0.002545 \$	0.000326
Over(0) pages (000)		1,669,691		1,572,793		1,557,540	1,577,272		1,785,507	1.901.442	1.959.995	1 918 349
Cumulation Occupants Bossess 250	S	12,197,093	~	12,149,826	w	8,554,010 \$	2,014,176	s	4,338,782 \$	6.128.348 \$	4 988 187 \$	625 372
Company Adjustments	v >	6,877,783	S	19,074,876	5	31,224,702 \$	39,778,712	s	41,792,888 \$	46,131,670 \$	52,260,018 \$	57,248,205
Cumulative Over/{Under} Recovery	S	19,074,876	w	31,224,702	۰۰	39,778,712 \$	41.792.888	<u>د</u>	46.131.670 \$	52 2KN 048 C	57 248 205 6	113 013 13
				:						* 010500440	£ 607(047) 10	31,613,311

<u>Please Note:</u> In Audit Exhibit GS-5, ORS reflects Over-Recovery amounts without parentheses and reflects (Under)-Recovery amounts with parentheses.

For the actual review period and estimated months, the monthly "Ranewable Purchased Power" (reflected on McManeus Exhibit 4, line 4) amounts are reflected on ORS's Audit Exhibit GS-5 in the "Purchased & Interchange Power" figures for those respective months.

2 41707888	IC STORY IC CONTROL OF	8,160,88	\$ 48,990,906
Cumulative Over/(Under) Base Fuel Component (per Audit Exhibit GS-5)	Cumulative Over/(Under) Environmental Component (ner Audit Fyhirit GS. 7)	Net Cumulative Base Fue and Environmental Commonweats Overlith Index Designation	פארוסוים בייני

Duke Energy Carolinas, LLC Total Environmental Costs June 2011 - May 2012 Docket No. 2012-3-E

Used for Environmental Cost Factor:

Total Environmental Costs) \$9		2,468,957	2,351,659	2,646,461	2,210,934	2,180,292	1 260 545	1,407,543	1,062,381	1,751,803	1,924,894	781,607	100ft);	1,109,/80	1,831,319	22,249,638
	%		15./4%	16.95%	16.62%	21.20%	9.95%	13.80%	13.6367	14.92%	4.41%	18.18%	29.29%	75 750/	0/.01.07	12.92%	15.72%
Urea	€9	767 006	300,020	398,346	439,842	468,680	216,801	175,256	214 700	06,417	661,17	349,836	228,917	301.218	017,100	236,626	3,496,337
nia	%	20 72%	20.02/0	24.7376	24.17%	23.37%	42.11%	8.20%	42,30%	30.040	30.04%	39.57%	-24.87%	3.64%	2000	%09.77	24.50%
Ammonia	69	511,556	497 647	720,047	033,043	516,721	918,188	104,123	704.651	540 187	701010	/01,/40	(194,389)	42.549	412.000	413,909	5,451,593
21	%	60.52%	61.14%	28 80%	56.00 /0 FF 330/	35.55%	47.74%	77.87%	43.45%	64.66%	43 330/	44.34%	95.46%	70.53%	7007 79	9/ 40	59.15%
Limestone	69	1,494,122	1,437,964	1.556.188	1 223 274	1,2623,4	1,040,928	988,533	722,249	1.132.763	814 616	014,010	/46,149	825,034	1 179 000	1941790	13,160,919
wances	%	3.02%	0.96%	0.41%	0.10%	700.0	0.20%	0.13%	1.24%	0.09%	-0.07%	0 130	0.770	0.08%	0.09%		0.63%
Emission Allowances	\$^ 3	74,653	22,502	10,786	2.259	4 175	1,571	1,033	20,691	1,654	(1.304)	030	000	686	1,625		140,789
Month		Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	II-AONI	Dec-11	Jan-12	Feb-12	Mar-12	Ar and	Apr-14	May-12	•	TOTALS

Duke Energy Carolinas, LLC Details of Environmental Costs June 2011 - September 2012 Docket No. 2012-3-E

Environmental Coete Incuesco	l				l			Actual	-						
		Jun-II	- 1	<u>11-11</u>	₽	<u>Aug-11</u>	Sep-11		Oct-11	ZI	Nov-11	Dec-11		Jai	Jan-12
Emission Allowances	⇔	74,653	⇔	22,502	₩	10,786 \$		2,259 \$	4,375	69	1,633 \$	8	20,691	ક્ર	1,654
Limestone	∽	1,494,122	⇔	1,437,964	. 1,	\$ 881,955,1	1,223,274	74 \$	1,040,928	69	988,533 \$	\$ 72	722,249	S 1,1	1,132,763
Ammonia	∽	511,556	€5	492,647	€9	639,645 \$	516,721	21 \$	918,188	69	104,123 \$	S 70	704,651	4 7	540,187
Urea	€	388,626	₩.	398,546	جو	439,842 \$	468,680	\$ 08	216,801	69	175,256 \$	\$ 21	214,790	\$	77,199
Sub-Total	€ 9	2,468,957	€9	2,351,659	.	2,646,461 \$	2,210,934	34 \$	2,180,292	69	1,269,545 \$	99'1 \$	1,662,381	\$ 1,7	1,751,803
Less: Gain on Emission Allowance Sales	59	515,200	₩	156,250	69	42,000 \$	362,500	\$ 00	ı	€ 9	,	∨ 9	1	∽	
Less: Inter-Company Sales	₩	14,873	69	23,633	٠	5,623 \$	10,352	52 \$	13,064	\$	7,231 \$	9 9	6,645	6/ 3	9,844
Net Environmental Cost	∳	1,938,884	€ 9	2,171,776	\$ 2,	2,598,838 \$	1,838,082	82 \$	2,167,228	5 ∕3	1,262,314 \$		1,655,736	\$ I.7	1,741,959
S.C. Retail MWh Sales		1,896,126	•	2,005,761	ર્પ	2,152,357	1,930,682	82	1,571,166		1,508,940	1,60	1,603,948	1,7	1,721,148
Total System MWh Sales		7,381,119	•	7,788,342	œ́	8,351,124	7,481,207	07	6,046,921	•,	5,867,549	6,27	6,271,931	6,5	0695,680
S.C. Allocation Factor of Total Environmental Costs		25.69%		25.75%		25.77%	25.81%	<u>*</u>	25.98%		25.72%	74	25.57%		24.96%
S.C. Share of Total Environmental Costs	59	498,099	∽	559,232	69	\$ 122,699	474,409	\$ 60	563,046	€9	324,667 \$		423,372 S		434,793
Amount Billed to SC Customers	ક્ક	635,377	59	682,707	€	731,870 \$	646,391	91 \$	630,311	\$	610,088 \$		677,339 \$		752,871
Over (Under)-Recovery	99	137,278	59	123,475	69	62,149 \$	171,982	82 \$	67,265	⊌ 7	285,421 \$		253,967 \$		318,078
Cumulative Over (Under)-Recovery - Prior Month	∞	3,595,468	6 7	3,732,746	3,	3,856,221 \$	3,918,370	20 S	4,090,352	رد ده	4,157,617 \$		4,443,038 \$		4,697,005
Cumulative Over (Under)-Recovery	⇔	3,732,746	SO.	3,856,221	3,	3,918,370 \$	4,090,352	\$2 \$	4,157,617	٠,	4,443,038 S		4,697,005 \$		5,015,083

Duke Energy Carolinas, LLC Details of Environmental Costs June 2011 - September 2012 Docket No. 2012-3-E

Environmental Coete Incurred		Actual					1 2	Estimated	70		
	Feb-12	Mar-12	<u>Apr-12</u>	May-12		Jun-12	Jul-12		Aug-12	Sep-12	l
Emission Allowances	\$ (1,304)	\$ 930	\$ 985	\$ 1,625	₩	4,844	\$ 5,684	84 8	4,123	3,0	3,073
Limestone	\$ 814,616	\$ 746,149	\$ 825,034	\$ 1,179,099	€ 9	1,513,689	\$ 1,609,059	S 65	1,783,612	\$ 1,407,960	09
Ammonia	\$ 761,746	\$ (194,389) \$	42,549	\$ 413,969	\$9	1,022,111	\$ 1,033,460	₩	1,085,915	\$ 896,454	54
Urea	\$ 349,836	\$ 228,917	\$ 301,218	\$ 236,626	∞	716,753	\$ 700,099	∞	574,189	\$ 358,810	01
Sub-Total	\$ 1,924,894	\$ 781,607	\$ 1,169,786	\$ 1,831,319	₩	3,257,397	\$ 3,348,302	69	3,447,839	\$ 2,666,297	76
Less: Gain on Emission Allowance Sales	\$ 968,432	\$ 968,432 \$	970,086	\$ 968,432	\$9	•	55	99	•	چ	
Less: Inter-Company Sales	\$ 11,860	\$ 12,970 \$	7,623	\$ 22,808	69	22,804	\$ 22,804	\$	22,804	\$ 22,804	90
Net Environmental Cost	\$ 944,602	\$ (262,795) \$	192,077	\$ 840,079	\$	3,234,593	\$ 3,325,498	\$ 80	3,425,035	\$ 2,643,493	83
S.C. Retail MWh Sales	1,669,691	1,572,793	1,557,540	1,577,272		1,785,507	1,901,442	12	1,959,995	1,918,319	61
Total System MWh Sales	6,519,271	6,137,030	5,909,384	6,037,638		6,798,638	7,381,038	80	7,628,113	7,328,811	=
S.C. Allocation Factor of Total Environmental Costs	25.61%	25.63%	26.36%	26.12%		26.26%	25.76%	%	25.69%	26.18%	%
S.C. Share of Total Environmental Costs	\$ 241,913	\$ (51,207) \$	50,631	\$ 219,429	€9	849,404	\$ 856,648	جه <u>م</u>	879,891	\$ 692,066	99
Amount Billed to SC Customers	\$ 702,640	\$ 649,046 \$	620,260	\$ 634,707	69	740,000	\$ 824,000	s	839,000	\$ 813,000	8
Over (Under)-Recovery	\$ 460,727	\$ 700,253 \$	569,629	\$ 415,278	⇔	(109,404)	\$ (32,648)	8) \$	(40,891)	\$ 120,934	8
Cumulative Over (Under)-Recovery - Prior Month	\$ 5,015,083	\$ 5,475,810 \$	\$ 6,176,063	\$ 6,745,692	⇔	7,198,018	\$ 7,088,614	69	7,055,966 \$	\$ 7,015,075	75
ORS Adjustments				\$ 5,151 \$ 18,670 \$ 13,227	ଚ ୫ ଡ			ı		\$ 1,024,804 (6)	9
Cumulative Over (Under)-Recovery	\$ 5,475,810	\$ 6,176,063 \$	6,745,692	\$ 7,198,018	-	\$ 7,088,614	\$ 7,055,966		\$ 7,015,075	\$ 8,160,813	13